OBJECTIVES
To understand how workspace layouts impact collaboration, especially with regard to spontaneous, unplanned communication.

DESIGN IMPLICATIONS
Team rooms can be designed to promote multidisciplinary collaboration while also facilitating privacy and other personal requirements. Designers can strive to strike a balance between collaborative space and private space within team rooms, while also aiming to provide interpersonal visibility and proper surface space (both vertical and horizontal) for the placement of important artifacts.

Designing Team Rooms for Collaboration in the Outpatient Clinics

Dubose, J., Lim, L., & Westlake, R. 2015 | Georgia Tech SimTigrate Design Lab. Pages 1-66

Key Concepts/Context
Healthcare systems in the U.S. are gradually shifting from “episodic” care delivered in silos to more team-oriented and coordinated approaches. Ambulatory care environments in particular are adopting the Patient Centered Medical Home (PCMH) model, which is an integrated, team-based model designed to optimize treatment and management of patients. This model incorporates a multidisciplinary approach to care that strives for forming long-term relationships with patients, monitoring population health, and utilizing the abilities of high-performing healthcare providers. While models like PCMH have been shown to improve outcomes, reduce costs, and create positive patient experiences, it is sometimes difficult for healthcare organizations to shift from more independent models to team-oriented models. Previous studies have revealed that the physical design of the “team room” in a given healthcare environment can affect how easily models like PCMH are adopted and implemented.

Methods
In order to learn how office designs effect newly emerging clinical team spaces, the authors of this study used multiple research approaches, including a literature review, a series of case studies at five different clinics, interviews, field observations, behavioral mapping, provider shadowing, and a simulation exercise. Analysis of the findings derived from these different approaches revealed the key objectives of integrated team care rooms and how the physical features of these rooms can promote success.

Findings
After analysis, the design factors affecting collaboration were divided into three levels: clinical, team room, and workstation. On the clinical level, important design factors included visibility throughout the clinic and into patient rooms, accessibility
and proximity to coworkers, talking rooms, and defined boundaries. In team rooms, important design factors included limited distractions, careful arrangement, visibility to other coworkers, and a balance between interpersonal space and collocation. At the workstation level, space for artifacts, workspace height, and presence of vertical surfaces were identified as important design factors. In general, employee proximity should strike a balance between easy collaboration and space for separation from distraction.

**Limitations**

This study is largely based on qualitative data gathered from healthcare environments located in areas with access to advanced healthcare technologies; these findings may not be applicable to healthcare environments globally, or to healthcare environments lacking the spatial requirements for designated team rooms.